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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,278	02/20/2004	Jiliang Song	VP108	7611

20178 7590 12/13/2007

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EXAMINER	
KRASNIC, BERNARD	

ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
12/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/783,278	SONG ET AL.	
	Examiner	Art Unit	
	Bernard Krasnic	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. The amendment filed 10/04/2007 have been entered and made of record.

2. The application has pending claim(s) 1-26.

3. In response to the amendments filed on 10/04/2007:

The "Objections to the claims" have been entered and therefore the Examiner withdraws the objections to the claims.

The "Claim rejections under 35 U.S.C. 101" have been entered, but the Applicant has not amended a few of the addressed 35 U.S.C. 101 issues and therefore the Examiner has once again addressed these issues.

4. The Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection because the Applicant has amended independent claim(s) 1, 8, 14, and 21 to include the limitation of "with multiple lines of the border image" respectively.

5. Applicant's arguments filed 10/04/2007 have been fully considered but they are not persuasive.

The Applicant alleges, "The Examiner asserts that Figures 3a and 3b ..." in pages 8-9, and states respectively that *firstly* the prior art reference is directed to a printed circuit board pattern and not a display, that *secondly* the amount of data

required for processing Dimicks data far exceeds the computing resources of a hand held device, and that *thirdly* Dimick is restricted to a line by line architecture instead of multiple lines. *Firstly*, the Examiner disagrees that Dimick does not require any display of a pattern because Dimick clearly states that the invention relates to generating printed circuit board master images for digital image display by providing increased data compression ratios using run length coding [see Dimick, col. 1, lines 9-13, col. 2, lines 57-61, abstract, lines 1-2]. *Secondly*, the Examiner agrees that Dimick does not specifically disclose a hand held device for computing image processing techniques / basic run-length encoding [this is because the Dimick patent is from 1986, a time when portable devices were not in the market yet], but it would be obvious to one of ordinary skill in the art at the time of the invention to have such a feature as Chen et al (US 2003/0198293 A1) discusses where run-length encoding may be implemented in the PDA or handheld computer (see Chen, paragraph [0025], lines 6 and 9-12). *Thirdly*, the Examiner also agrees that Dimick is restricted to a line by line architecture instead of multiple line for run-length encoding, but it would be obvious to one of ordinary skill in the art at the time of the invention to have such a feature as Khuri ("Interactive packages for learning image compression algorithms" - ACM 2000, pages 73-76) discusses run-length encoding uses a multi-line type architecture (see page 74, Section – Row by row compression, Figure 1, counts the run length of the bitmap which is being analyzed, e.g. 0 white pixels – then 72 consecutive black pixels [this 72 count consists of several lines or rows of consecutive black pixels] – then 4 consecutive white pixels, etc.). Therefore, claim 1 is still not in condition for allowance and is still not patentably

distinguishable over the prior art references Dimick in view of Khuri and Chen. For further discussions, see the art rejection below.

The Applicant alleges, "Claim 2 has been amended ..." in page 9, and states respectively that *firstly* the prior art reference Dimick does not disclose the border image surrounds the main image as recited in claim 2, that *secondly* Dimick is incapable of having the block associated with multiple lines as recited in claim 6, and that *thirdly* Dimick does not specify generating the image from a single table as recited in claim 6. *Firstly*, the Examiner disagrees because Dimick does disclose that the border image / white areas or 0's surrounds the main image / dark areas or X's or 1's (see Dimick, Figs. 2a and 3a, the white areas or 0's surround the dark areas or X's or 1's). *Secondly*, the Examiner agrees that Dimick does not specifically disclose having the block associated with multiple lines but as discussed above, Khuri does disclose defining a compressed data structure to represent a block associated with the multiple lines (see page 74, Section – Row by row compression, Figure 1, run-length encoding is not limited to a line by line architecture but multi-line type architecture, Figure 1, counts the run length of the bitmap which is being analyzed, e.g. 0 white pixels – then 72 consecutive black pixels [this 72 count consists of several lines or rows of consecutive black pixels] – then 4 consecutive white pixels, etc.). *Thirdly*, the Examiner disagrees because Dimick does disclose generating the image from a single table / pattern library RAM (see Fig. 6, ref. no. 58, col. 10, lines 9-24, although several pattern libraries are used, the single pattern library RAM is the table provider to the data). Therefore claims 1-7 are still not in

condition for allowance and are still not patentably distinguishable over the prior art references. For further discussions, see the art rejection below.

The Applicant alleges, "Claim 8 includes ..." in page 10, "Claim 14 includes ..." in page 10, and "Claim 21 includes ..." in page 10, and states that independent claims 8, 14, and 21 are allowable over Dimick similarly as stated above with regard to claim 1. However the Examiner disagrees because as discussed above, independent claim 1 is still not in condition for allowance and therefore similarly independent claims 8, 14, and 21 are also not in condition for allowance. Therefore claims 1-21 are not in condition for allowance. For further discussions, see the art rejection below.

The Applicant alleges, "Applicants traverse the Examiner's assertion that Official Notice is taken ..." in page 10, and states respectively that the Examiner's Official Notice toward claims 22-26 provides no technical basis. The Examiner uses Dimick in view of the two new references Chen et al (US 2003/0198293 A1) and Yu et al (US 6,563,513 B1) to show that these claim limitations are exceedingly obvious to one of ordinary skill in the art at the time of the invention as previously mentioned in the Examiner's Official Notice. For further discussions, see the art rejection below. Therefore claims 22-26 are still not in condition for allowance.

Claim Rejections - 35 USC § 101

6. Claims 1-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In claims 1-26, a "device" is not subject matter limited to that which falls within a

statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. Instead, it includes a form of energy or more specifically, a transmission of signals. A device as viewed in accordance with the specification in lines 3-5 of paragraph [0044] can be a medium or an "electromagnetic carrier wave" in which the computer code is embodied; that is a suggestion of a transmission of signals which does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter. The Applicant alleges, "Claims 21-26 were rejected as being directed toward non-statutory subject matter ..." in page 8 of the amendment filed 10/04/2007, and states respectively that a GPU is a mechanical device and is statutory subject matter and that any GPU can process signals and a signal is not being claimed. *The Examiner appreciates the suggestion from the Applicant that the device is not being claimed as a signal, but the specification clearly is stating that in actuality it could be a signal. Therefore the Examiner once again suggests removing lines 3-5 of paragraph [0044] which suggest that the device can be an electromagnetic carrier wave (a form of energy).*

Appropriate Correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 2-5, 6-7, 12, 15-18, and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re Claim 2, line 2: The limitation "surrounds" was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is suggested to be "around" as suggested in line 1 of claim 1.

Re Claim 6, lines 8-9: The limitation "entirely from the table" was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re Claim 12, lines 5-6: The limitation "entirely from the template" was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art

that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re Claim 15, line 4: The limitation "entirely from the decompressed data" was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re Claim 23, line 4: The limitation "entirely from the display buffer" was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 3-5 are dependent upon claim 2.

Claim 7 is dependent upon claim 6.

Claims 16-18 are dependent upon claim 15.

Appropriate correction is required.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 6-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re Claim 6: The claim limitations of claim 6 are very similar to the amended claim language used in claim 1 and therefore seem to be conflicting because in some instances claim 6 is not further limiting.

Re Claim 8, lines 6-9: The limitation "determining a compressed template layout ... for multiple lines of border image" seems that it should be placed after the limitation "defining a table representing ... by a corresponding second single bit in the table" because the limitations "the first single bit" and "the second single bit" in line 8 lack clear antecedent basis.

Re Claim 10: This claim is not further limiting of claim 8 and therefore should be canceled.

Claim 7 is dependent upon claim 6.

Claims 9 and 13 are dependent upon claim 8.

Claims 11-12 are dependent upon claim 10.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 1-16 and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimick (US 4,566,038, as applied in previous Office Action), in view of Khuri ("Interactive packages for learning image compression algorithms" - ACM 2000, pages 73-76) and Chen et al (US 2003/0198293 A1).

Re Claim 1: Dimick discloses a method for incorporating a border around a displayed image, comprising operations of identifying a main image / dark areas or X's or 1's (see Figs. 3a and 3b, the X's from Fig. 3a or the 1's from Fig. 3b represent the main image); selecting a border image / white area or 0's to be associated with the main image (see Figs. 3a and 3b, the white areas from Fig. 3a or the 0's from Fig. 3b represent the border image of the main image); mapping / run-length encoding the border image to a table / pattern library (58, 62, Figure 6) such that each pixel of the border image is represented by a corresponding single bit / most significant bit of a byte is equal to 0 in the table, the mapping including, defining a first single bit value / bit value 0 for respective border image pixels (see Figs. 3a-3c, col. 6, lines 51-53 and 66-68, col. 7, lines 1-4); and defining a second single bit value / bit value 1 for respective main image pixels (see Figs. 3a-3c, col. 6, lines 51-53 and 66-68, col. 7, lines 1-4); compressing data / run length encoding defining the table / pattern library (see col. 2, lines 32-40),

the compressing including, identifying a compressed value / run length byte code to represent whether the corresponding single bit is one of the first single bit value and the second single bit value and how many identical single bits / run length follow the corresponding single bit in the table (see Figs. 3a-3c, col. 6, lines 51-53 and 66-68, col. 7, lines 1-4, the example in Fig. 3c is the run length code "00000010" for the initial border or white area in line 1 of Fig. 3a where the most significant bit of the byte 0 represents the border or white area of Fig. 3a and the remaining seven bits represent a run length of 2); applying the compressed data / run length encoding from the table / pattern library to a display / digital image display of the main image in order to incorporate the border image with the main image (see col. 1, lines 9-13, col. 2, lines 57-61, by having this run length encoding with the pattern library, the storage requirements to allow a display is reduced) on a display panel / display (Dimicks invention relates to generating printed circuit board master images for digital image display by providing increased data compression ratios using run length coding [see Dimick, col. 1, lines 9-13, col. 2, lines 57-61, abstract, lines 1-2]).

However, Dimick fails to specifically disclose that the method is for a handheld device with a display panel, and that a value representing an amount of the identical single bits following the corresponding single bit is associated with multiple lines of the border image.

Khuri discloses a value representing an amount of the identical single bits / run-length [similar to Dimicks run length counter] following the corresponding single bit / black or white representative bit is associated with multiple lines / multiple rows of the

border image [Dimick teaches that the white area is the border image, Dimick teaches a value of the run length counter following the corresponding single bit for a single line] (see Khuri, page 74, Section – Row by row compression, Figure 1, counts the run length of the bitmap which is being analyzed, e.g. 0 white pixels – then 72 consecutive black pixels [this 72 count consists of several lines or rows of consecutive black pixels] – then 4 consecutive white pixels, etc.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dimick's method using Khuri's teachings by including to Dimick's run length encoder to consider multiple lines / rows instead of a line / row by line / row architecture in order to improve the compression using the large runs of the same pixel (see Khuri, page 74, left paragraph "The level of compression ...", lines 3-4, Section – Row by row compression, Figure 1).

However, Dimick as modified by Khuri still fails to specifically disclose that the method is for a handheld device with a display panel [this is because the Dimick patent is from 1986, a time when portable devices were not in the market yet].

Chen discloses image processing along with the specific compression run length encoding algorithm may be implemented on a hand-held device / hand-held computer or PDA with a display panel (see Chen, paragraph [0025], lines 6 and 9-12, hand-held computer's and PDA's have display panels).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Dimick's method, as modified by Khuri, using Chen's teachings by including the hand-held device or PDA device to implement

Dimick's image processing and run length type compression scheme in order to improve the image processing by manipulating the digital information based on programming instructions within the computer type system (see Chen, paragraph [0025], lines 9-15).

Re Claim 2: Dimick further discloses that the border image / white areas or 0's surrounds the main image / dark areas or X's or 1's (see Dimick, Figs. 2a and 3a, the white areas or 0's surround the dark areas or X's or 1's).

Re Claim 3: Dimick further discloses defining the compressed value as a byte / a byte or 8 bits, wherein a most significant bit of the byte is associated with the one of the first bit value / 0 and the second bit value / 1, the remaining bits of the byte / 7 right most bits of the byte corresponding to successively repeated bits / run length of the one of the first bit value and the second bit value (see Figs. 3a-3c, col. 6, lines 51-53 and 66-68, col. 7, lines 1-4, the example in Fig. 3c is the run length code "00000010" for the initial border or white area in line 1 of Fig. 3a where the most significant bit of the byte 0 represents the border or white area of Fig. 3a and the remaining seven bits represent a run length of 2).

Re Claim 4: Dimick further discloses determining if an amount of identical single bits / run length following the corresponding single bit / most significant bit in the table / pattern library is greater than a maximum amount capable / run length of 127 of being represented by a seven bit value (see col. 7, lines 9-11); if the amount of identical single

bits is greater than the maximum amount, then the method includes, combining multiple bytes / two successive run length codes to represent the compressed value (see col. 7, lines 12-13), each of the multiple bytes / two successive run length codes have a common most significant bit (taking two successive run length codes as described above).

Re Claim 5: Dimick further discloses representing the amount of identical single bits / run length as a combination of the multiple bytes / five-byte run length or 16 bits in which the common most significant bit is removed (see col. 7, lines 13-15 and 63-68, col. 8, lines 1-8).

Re Claim 6 [as best understood by the Examiner]: Dimick further discloses defining a compressed data structure / run length code (see Fig. 3c) to represent a block of successively repeated single bits / run length in the table / pattern library (see Figs. 3a-3c, col. 6, lines 51-53 and 66-68, col. 7, lines 1-4, the example in Fig. 3c is the run length code "00000010" for the initial border or white area in line 1 of Fig. 3a where the most significant bit of the byte 0 represents the border or white area of Fig. 3a and the remaining seven bits represent a run length of 2), the block associated with the multiple lines / rows (see Khuri, page 74, Section – Row by row compression, Figure 1, counts the run length of the bitmap which is being analyzed, e.g. 0 white pixels – then 72 consecutive black pixels [this 72 count consists of several lines or rows of consecutive black pixels] – then 4 consecutive white pixels, etc.); storing the compressed data

structure / stored in library; and generating the table through decompression / decode (56) (see Fig. 6, col. 10, lines 9-21) of the compressed data structure for subsequent display of the main image and the border image entirely from the table / pattern library RAM (58, 62) (see Fig. 6, col. 10, lines 9-24, although several pattern libraries are used, the single pattern library RAM is the table provider to the data).

Re Claim 7: Dimick further discloses the compressed data structure / run length code is a byte / a byte or 8 bits of data having a most significant bit representative of one of the first single bit value / 0 and the second single bit value / 1 and remaining bits of the byte of data indicating an amount associated with the successively repeated bits / run length (see Figs. 3a-3c, col. 6, lines 51-53 and 66-68, col. 7, lines 1-4, the example in Fig. 3c is the run length code "00000010" for the initial border or white area in line 1 of Fig. 3a where the most significant bit of the byte 0 represents the border or white area of Fig. 3a and the remaining seven bits represent a run length of 2).

As to claims 8-11, the claims are the corresponding method to claims 1 and 3 respectively. The discussions are addressed with regard to claims 1 and 3.

Re Claim 12: Dimick further discloses storing the compressed template layout / run length code (see col. 6, lines 51-53 and 66-68, col. 7, lines 1-4, the run length codes are stored in the pattern library); requesting / run length encoding (see Fig. 3c, col. 6, lines 51-53 and 66-68, col. 7, lines 1-4) the main image be combined with the border image;

and decompressing / decode (56) (see Fig. 6, col. 10, lines 9-21) the compressed template layout in response to the request, to generate the border around the displayed image in an entirety from the template layout / pattern library RAM (58, 62) (see Fig. 6, col. 10, lines 9-24, although several pattern libraries are used, the single pattern library RAM is the table provider to the data).

Re Claim 13: Dimick further discloses selecting one of a main image pixel value and a border image pixel value based on a value of the template / the most significant bit of the run length code byte (col. 6, lines 51-53 and 66-68, col. 7, lines 1-4).

As to claims 14, the claims are the corresponding system claims to claims 1 and 6 respectively. The discussions are addressed with regard to claims 1 and 6.

Re Claim 15: Dimick further discloses logic for accessing (56) the compressed data in the buffer (58) (see Fig. 6, col. 10, lines 9-21, the decoder accesses the stored compressed data); and logic for decompressing (56) the compressed data in order to present the image having the border (see Fig. 6, col. 10, lines 9-21, col. 1, lines 9 and 33-34) in an entirety from the decompressed data (see Fig. 6, col. 10, lines 9-24, although several pattern libraries are used with the decoder, the single pattern library RAM is the table provider to the data).

Re Claim 16: Dimick further discloses logic / decoder (56) for identifying a most significant bit of the decompressed data as being associated with one of the first single bit value and the second single bit value (see Fig. 6, col. 10, lines 9-21, the decoder decodes the compressed information by doing the opposite of the compression technique); and logic (56) for determining a number of repeated bits following the most significant bit (see Fig. 6, col. 10, lines 9-21, the decoder decodes the compressed information by doing the opposite of the compression technique).

As to claim 19, the discussions are addressed with respect to claims 1 and 3.

As to claim 20, the discussions are addressed with respect to claim 4.

As to claim 21, the claim is the corresponding system claim to claims 1 and 3 respectively. The discussions are addressed with regard to claims 1 and 3.

Re Claims 22: Dimick further discloses a central processing unit (50), a main memory / RAM (58). Chen further discloses a CPU, a main memory, a display panel in communication with the graphics processing unit, and a bus in communication with the CPU, memory, and the GPU (see Chen, paragraph [0025], lines 9-12, a PDA and hand-held computer have computer elements such as a CPU, memory, graphics unit, display panel, and bus).

Re Claims 23: Dimick further discloses to store the compressed single bit values for eventual decompression / decoding (56) for display of the image data having the border

in an entirety from the buffer (58) (see Dimick, Fig. 6, col. 10, lines 9-24, although several pattern libraries are used with the decoder, the single pattern library RAM is the table provider to the data). Chen further discloses the GPU / graphics unit includes a memory region / RAM having a display buffer, the display buffer / RAM configured to store the compressed data / run-length encoded data (see Chen, paragraph [0025], lines 6 and 9-12, a PDA and hand-held computer have computer elements such as a graphics unit and a memory RAM having a display buffer, the RAM memory storing the run-length encoded data).

Re Claim 24: Chen further discloses the device is selected from the group consisting of a cellular phone, a pocket personal computer / hand held computer, a web tablet, and a personal digital assistant / PDA (see Chen, paragraph [0025], lines 9-12).

13. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimick as modified by Khuri and Chen. The teachings of Dimick as modified by Khuri and Chen have been discussed above.

Although Dimick, as modified by Khuri and Chen, doesn't specifically disclose, as recited in claim 17, the logic for decompressing the compressed data is a 14 bit counter, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have such a feature because Dimick teaches having two successive run length coded bytes (see col. 7, lines 12-13) when the run length is greater than 127 (the

most significant bit of each byte representing the border or main image and the remaining seven bits of each byte representing the run length) and therefore a 14 bit counter (7 bits of the first run length coded byte and 7 bits of the successive run length coded byte) would be the way to decompress the compressed two successive bytes.

Although Dimick, as modified by Khuri and Chen, doesn't specifically disclose, as recited in claim 18, logic for determining a number of repeated bits is configured to provide a select signal to a multiplexer based upon the most significant bit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have such a feature because feeding the most significant bit to a multiplexer along with the run length will help distinguish if a border pixel or Dimick's white area will be displayed or if an image pixel or Dimick's X pixel will be displayed (see Fig. 3a) with the appropriate run length.

14. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimick, as modified by Khuri and Chen, and further in view of Yu et al (US 6,563,513 B1). The teachings of Dimick as modified by Khuri and Chen have been discussed above.

Re Claim 25: Dimick further discloses logic for receiving the table / decoder (56).

However, Dimick, as modified by Khuri and Chen fails to specifically disclose receiving the table from a distributed network; the distributed network is over one of a wired connection and a wireless connection.

Yu discloses receiving run-length compressed data over a wireless cell phone or PDA type network (see Yu, Figure 1, col. 4, lines 11-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Dimick, as modified by Khuri and Chen, using Yu's teachings by including the ability to transmit compressed data to the PDA's processor in order to reduce the computation load on the PDA by allowing the processor in the network to do the actual run-length compression (see Yu, col. 4, lines 11-16).

Re Claim 26: Yu further discloses the distributed network is over one of a wired connection and a wireless connection / wireless (see Yu, Figure 1, col. 4, lines 11-16).

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Varga discloses a system and method for optimizing color compression using transparency control bits.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Krasnic whose telephone number is (571) 270-1357. The examiner can normally be reached on Mon-Thur 8:00am-4:00pm and every other Friday 8:00am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bernard Krasnic
December 7, 2007

JINGGE WU
SUPERVISORY PATENT EXAMINER